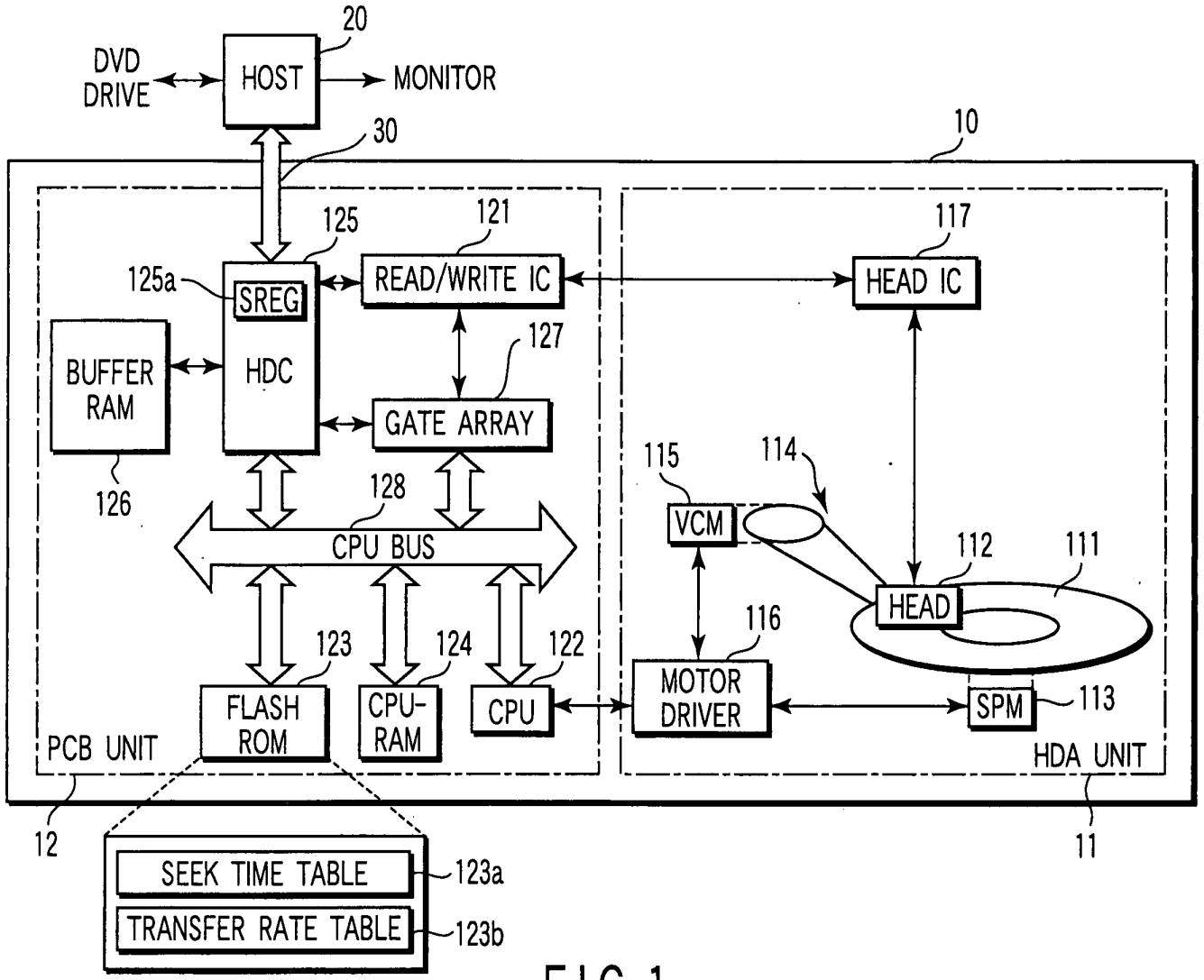
DVD DRIVE
HOST
MONITOR
20
30
10
125
121
117
125a
SREG
READ/WRITE IC
HEAD IC
BUFFER RAM
HDC
127
GATE ARRAY
126
128
115
114
VCM
CPU BUS
112
111
HEAD
116
123
124
122
MOTOR DRIVER
SPM
113
FLASH ROM
CPU-RAM
CPU
PCB UNIT
HDA UNIT
12
11
SEEK TIME TABLE
123a
TRANSFER RATE TABLE
123b

FIG. 1

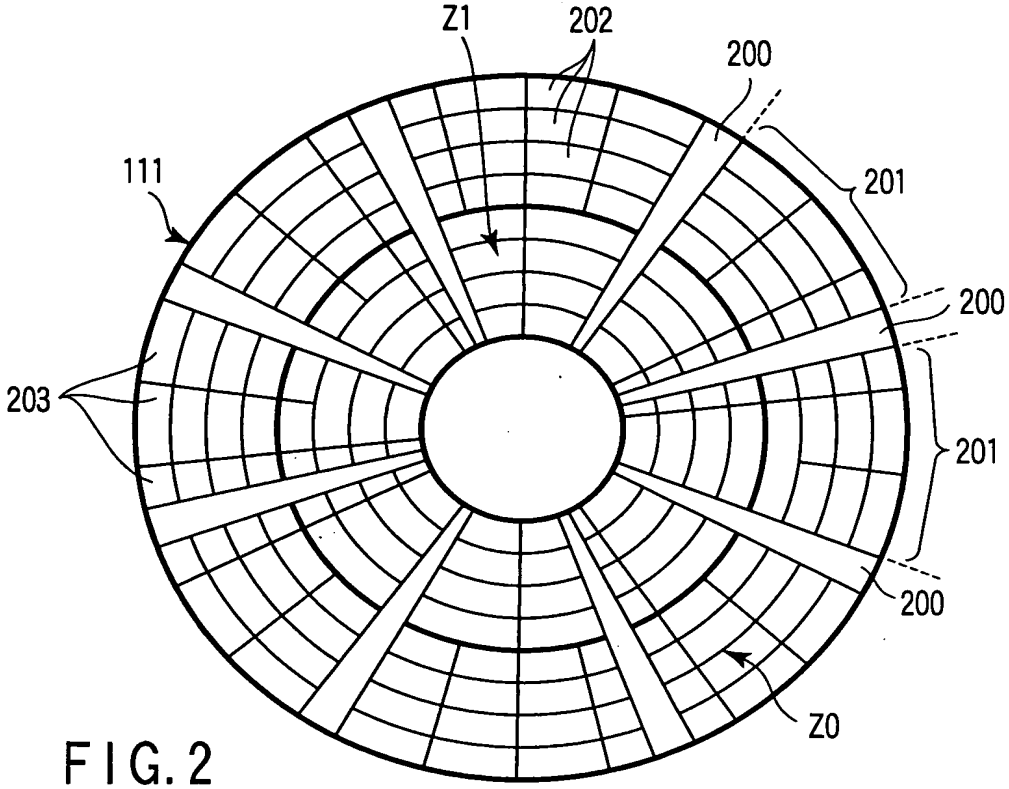

FIG. 2

123a

NUMBER OF TRACKS	SEEK TIME
Nt_1	Ts_1
Nt_2	Ts_2
⋮	⋮
Nt_n	Ts_n

FIG. 3

123b

ZONE #	TRANSFER RATE
Z0	TR0
Z1	TR1

FIG. 4

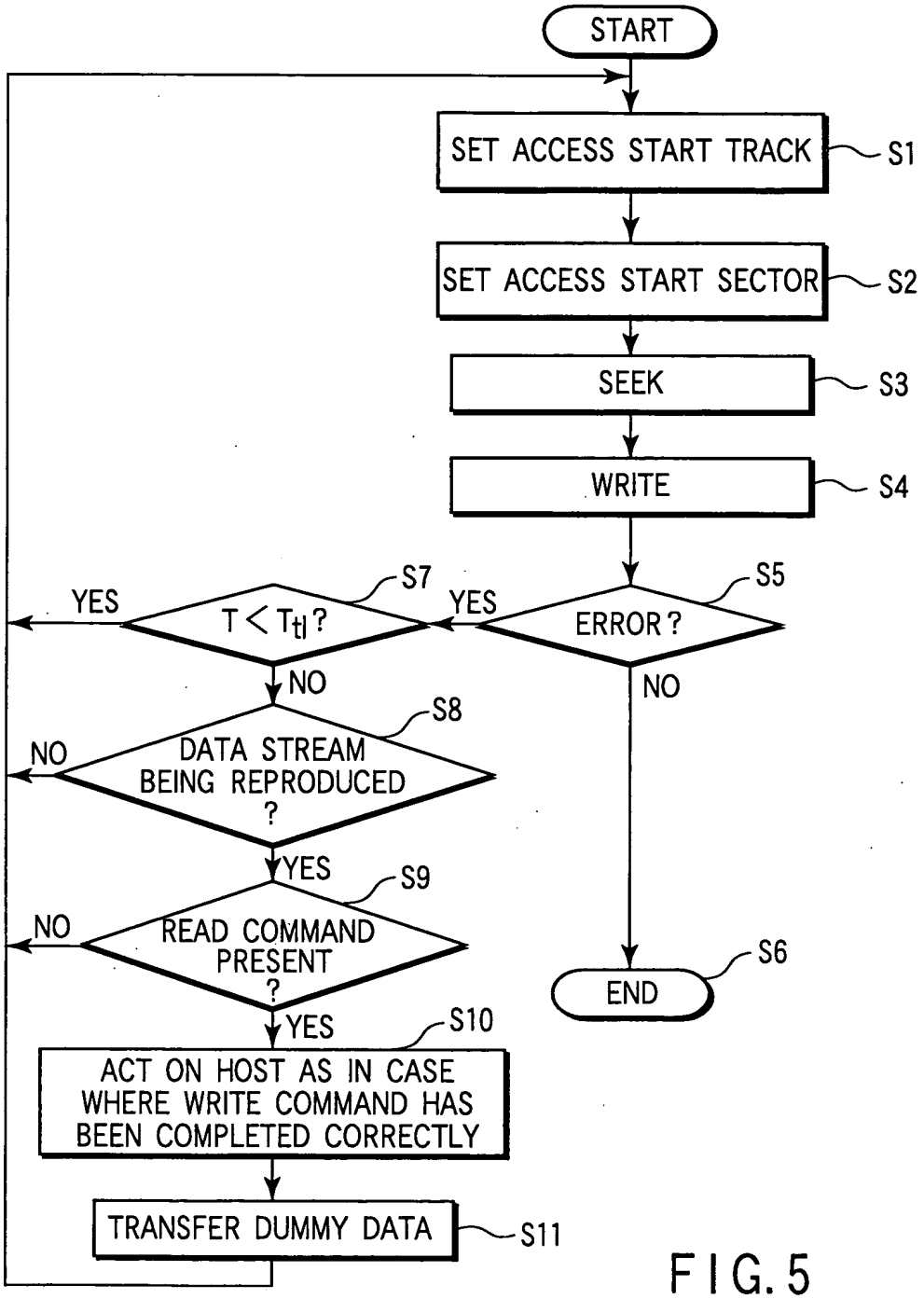
START
SET ACCESS START TRACK
S1
SET ACCESS START SECTOR
S2
SEEK
S3
WRITE
S4
ERROR ?
S5
YES
NO
T < Ttl ?
S7
YES
NO
DATA STREAM BEING REPRODUCED ?
S8
NO
YES
READ COMMAND PRESENT ?
S9
NO
YES
END
S6
ACT ON HOST AS IN CASE WHERE WRITE COMMAND HAS BEEN COMPLETED CORRECTLY
S10
TRANSFER DUMMY DATA
S11

FIG. 5

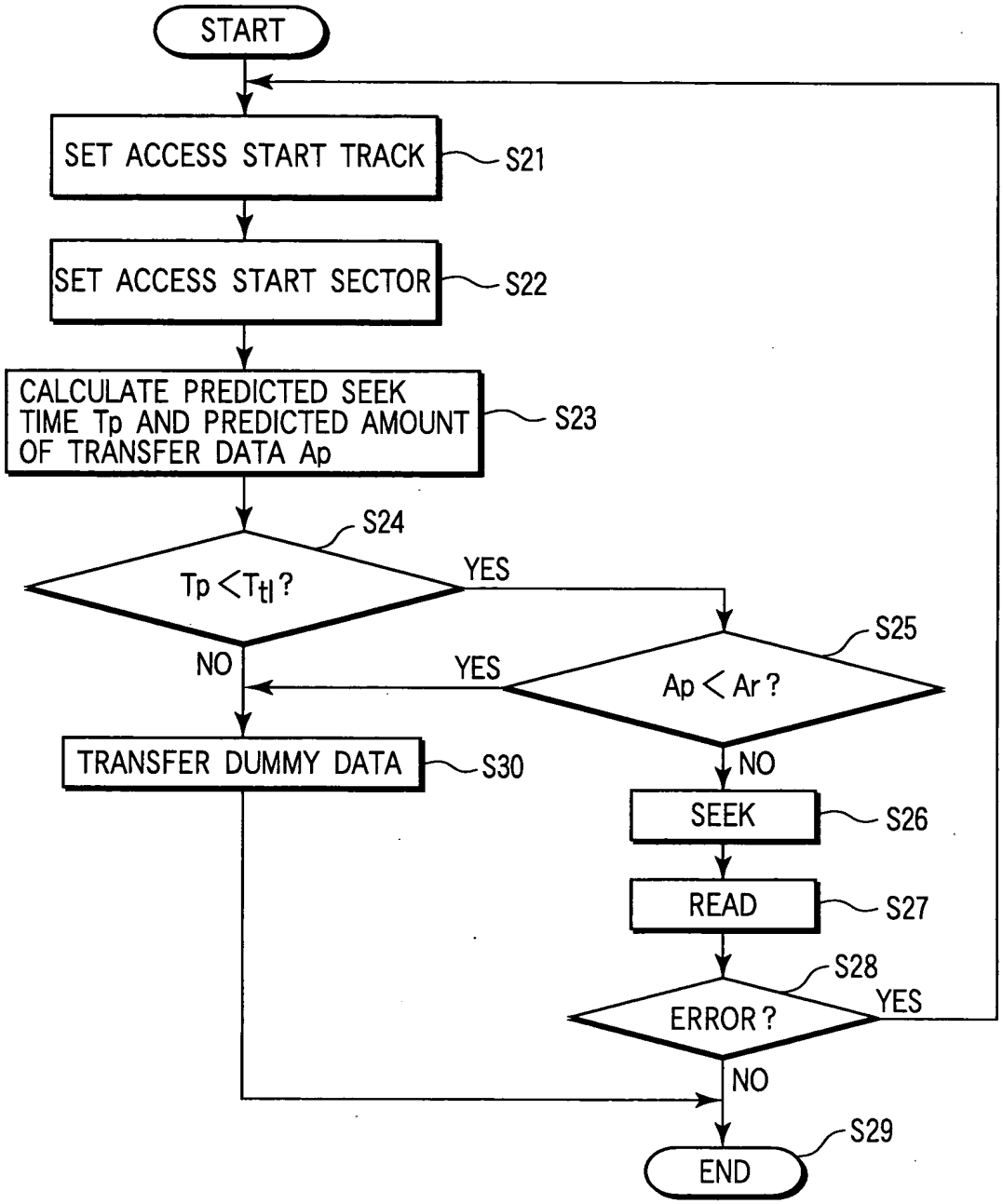
START
SET ACCESS START TRACK
S21
SET ACCESS START SECTOR
S22
CALCULATE PREDICTED SEEK TIME Tp AND PREDICTED AMOUNT OF TRANSFER DATA Ap
S23
S24
Tp < Ttl ?
YES
NO
S25
Ap < Ar ?
YES
NO
TRANSFER DUMMY DATA
S30
SEEK
S26
READ
S27
S28
ERROR ?
YES
NO
S29
END

FIG. 6